



TOWN OF DISCOVERY BAY

A COMMUNITY SERVICES DISTRICT

SDLF Gold-Level of Governance



President – Bill Mayer • Vice-President – Bill Pease • Director – Kevin Graves • Director – Robert Leete • Director – Bryon Gutow

**NOTICE OF THE REGULAR MEETING
OF THE WATER AND WASTEWATER COMMITTEE
OF THE TOWN OF DISCOVERY BAY
Wednesday, October 2, 2019
STANDING WATER AND WASTEWATER COMMITTEE REGULAR MEETING
5:30 P.M. – 6:30 P.M.
Community Center
1601 Discovery Bay Boulevard, Discovery Bay, California
Website address: www.todb.ca.gov**

Water and Wastewater Committee Board Members

*Chair Bill Pease
Vice-Chair Bill Mayer*

- A. ROLL CALL**
1. Call business meeting to order 5:30 p.m.
 2. Roll Call.
- B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)**
- During Public Comments, the public may address the Committee on any issue within the District's jurisdiction which is not on the Agenda. The public may comment on any item on the Agenda at the time the item is before the Committee for consideration by filling out a comment form. The public will be called to comment in the order the comment forms are received. Any person wishing to speak will have 3 minutes to make their comment. There will be no dialog between the Committee and the commenter as the law strictly limits the ability of Committee members to discuss matters not on the agenda. We ask that you refrain from personal attacks during comment, and that you address all comments to the Committee only. Any clarifying questions from the Committee must go through the Chair. Comments from the public do not necessarily reflect the view point of the Committee members.
- C. DRAFT MINUTES TO BE APPROVED**
1. September 4, 2019 Regular Water and Wastewater Committee DRAFT meeting minutes.
- D. PRESENTATIONS**
1. Water and Wastewater Update.
- E. DISCUSSION ITEMS**
1. Discussion Regarding the Location of Well No. 8.
 2. Discussion Regarding Willow Lake Pipe Repair.
 3. Discussion Regarding Wastewater Master Plan Updates and Denitrification Project.
 4. Discussion Regarding NPDES Permit.
- F. FUTURE DISCUSSION/AGENDA ITEMS**
- G. ADJOURNMENT**
1. Adjourn to the next Standing Water and Wastewater Committee meeting at the Community Center located at 1601 Discovery Bay Boulevard.

"This agenda shall be made available upon request in alternative formats to persons with a disability, as required by the American with Disabilities Act of 1990 (42 U.S.C. § 12132) and the Ralph M. Brown Act (California Government Code § 54954.2). Persons requesting a disability related modification or accommodation in order to participate in the meeting should contact the Town of Discovery Bay, at (925) 634-1131, during regular business hours, at least forty-eight hours prior to the time of the meeting."

"Materials related to an item on the Agenda submitted to the Town of Discovery Bay after distribution of the agenda packet are available for public inspection in the District Office located at 1800 Willow Lake Road during normal business hours."



TOWN OF DISCOVERY BAY

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MINUTES OF THE REGULAR MEETING OF THE WATER AND WASTEWATER COMMITTEE OF THE TOWN OF DISCOVERY BAY

Wednesday, September 4, 2019

STANDING WATER AND WASTEWATER COMMITTEE REGULAR MEETING

5:30 P.M. – 6:30 P.M.

Community Center

1601 Discovery Bay Boulevard, Discovery Bay, California

Website address: www.todb.ca.gov

Water and Wastewater Committee Board Members

Chair Bill Pease
Vice-Chair Bill Mayer

A. ROLL CALL

1. Call business meeting to order 5:30 p.m. – By Chair Pease
2. Roll Call – All Present.

General Manager Davies – Stated that Discussion Item E-5 to be moved to the first item.

B. PUBLIC COMMENTS (Individual Public Comments will be limited to a 3-minute time limit)

None.

C. DRAFT MINUTES TO BE APPROVED

1. August 7, 2019 Regular Water and Wastewater Committee DRAFT meeting minutes – Approved.

D. PRESENTATIONS

1. Water and Wastewater Update – No update.

E. DISCUSSION ITEMS

1. Discussion Regarding the Well 4A Motor Replacement.

District Water Engineer Shobe – Provided handouts and an update regarding the Well 4A motor replacement and replacement options. There was discussion regarding the motor replacement and warranty.

General Manager Davies – Stated that the recommendation from the Water and Wastewater Committee is to choose Option 3A and bring back to the Board for approval. There was discussion regarding an RFP, cost for replacement, and the timeline for replacement.

2. Discussion Regarding Rate Study Concerning Wastewater Treatment Plants No. 1 and No. 2.

General Manager Davies – Provided a background regarding the movement of Plant No. 1 to Plant No. 2; costs for the project, and impact for the rate payer. Also, there will be a full presentation at tonight's Board meeting.

Assistant General Manager Breitstein – Provided additional details regarding the different scenarios, the timeline and numbers for the project. There was discussion regarding the number of years borrowed related to the impact of the debt and a public hearing.

3. Discussion Regarding Wastewater Master Plan Updates.

District Engineer Harris – Provided the updates regarding the Wastewater Master Plan; provided a handout with a summary of section 20 of the Master Plan. There was discussion regarding the costs of Denitrification and Operation and Maintenance Manual (O&M), moving Plant No. 1 to Plant No. 2, impact for the rate payer and solar. The discussion continued regarding the land at Plant No. 1, leasing the land and the size of the land (approximately 10 acres). There was additional discussion regarding the schedule for completion; presentation of the Wastewater Master Plan at the next Board meeting and the drop dead date.

District Engineer Harris – Stated that the decision for Plant No.1 will be presented in 2 weeks; 1st meeting in October, then 2nd meeting in October the Master Plan will be presented.

General Manager Davies – Stated that the date is the 2nd Board meeting in October; October 16, 2019.

District Engineer Harris – Stated that the 2nd meeting in September (September 18, 2019) will summarize the Master Plan, 1st meeting in October provide project costs and recommendations and then the 2nd meeting in October (October 16, 2019) final decision for the Board regarding Plant No. 1, then the November meeting will provide a contract for approval for the design.

Public Comment Regarding:

- Bond money; borrowing or using the reserves.

There was discussion regarding the reserves.

4. Discussion Regarding Reject Water.

There was discussion regarding the Blue Green Algae. The consensus of the Water and Wastewater Committee is that there are no issues with reject water.

5. Discussion Regarding Shed for Vehicles.

District Engineer Harris – Provided the details of the shed for the vehicles and the cost to expand. There was discussion regarding the cost of expansion.

F. FUTURE DISCUSSION/AGENDA ITEMS

1. Master Plan Updates.

G. ADJOURNMENT

1. The meeting adjourned at 6:38 p.m. to the next Standing Water and Wastewater Committee meeting at the Community Center located at 1601 Discovery Bay Boulevard.

//cmc – 09-09-19

<http://www.todb.ca.gov/agendas-minutes>

Town's Well 8 Site Locations

The following is a summary of communications with some property owners and the County regarding land acquisition for the Town's Well 8 Site. Attached is an updated map.

Slifer Park.

The County is willing to grant us an easement which would cost about \$10,000 but they recently imposed a condition that the Town provide the County with ½ an acre of park land to make up for the loss of the ½ acre at Slifer Park. We are waiting for the County to respond to our question as to where this condition is coming from.

Pantages Subdivision.

The project proponent indicated that he is willing to work with us to find a location for Well 8. Originally, he felt they would be grading in three years but now they feel that they may start grading a year or two from now. They are also excited about the possibility of partnering with us on our well providing lake fill water for the lake they will be constructing. This will provide a cost sharing opportunity that could offset some of our project costs and provide additional revenue for the Town by selling them lake fill water long into the future. Luhdorff and Scalmanini and Mike Yeraka built a similar lake fill water supply project in Oakley for the Summer Lakes subdivision. We will have a deeper discussion with the developer around the middle of October once they finalize their grading plan before submitting it to the County.

Old River Elementary School.

Superintendent Harvey Yurkovich would only be supportive of the well going in the area of their stormwater detention basin. Use of this site is problematic since the School District granted an easement to adjacent landowners to use the entire site as a stormwater detention basin. The County has indicated that we would need to secure the approval from all 5 adjacent property owners to regrade the detention basin to provide the same stormwater storage volume and provide us with a level pad for the well site. This would also require a grading plan design and processing through the County to determine if this is even possible.

Avvari Site north of the school.

This would be a very good site for the project. There are utilities with road access adjacent to the site as well as a watermain for us to connect the well. Unfortunately, the property owners do not want to sell us ½ an acre of their 22 acre site. The Town does have the power of Eminent Domain and could purchase the ½ acre through the court system. This would not be a very difficult process but would require the hiring of an appraiser and attorneys.

Travis Thornton Site Adjacent to Avvari Site.

Also north of the school, adjacent to and west of the Avvari Site, is a 5 acre site owned by Mr. Travis Thornton. He is not interested in selling us ½ an acre for the well site.

EBMUD.

South of the school is owned by EBMUD who indicated that they are not interested in selling us ½ an acre for the well site.

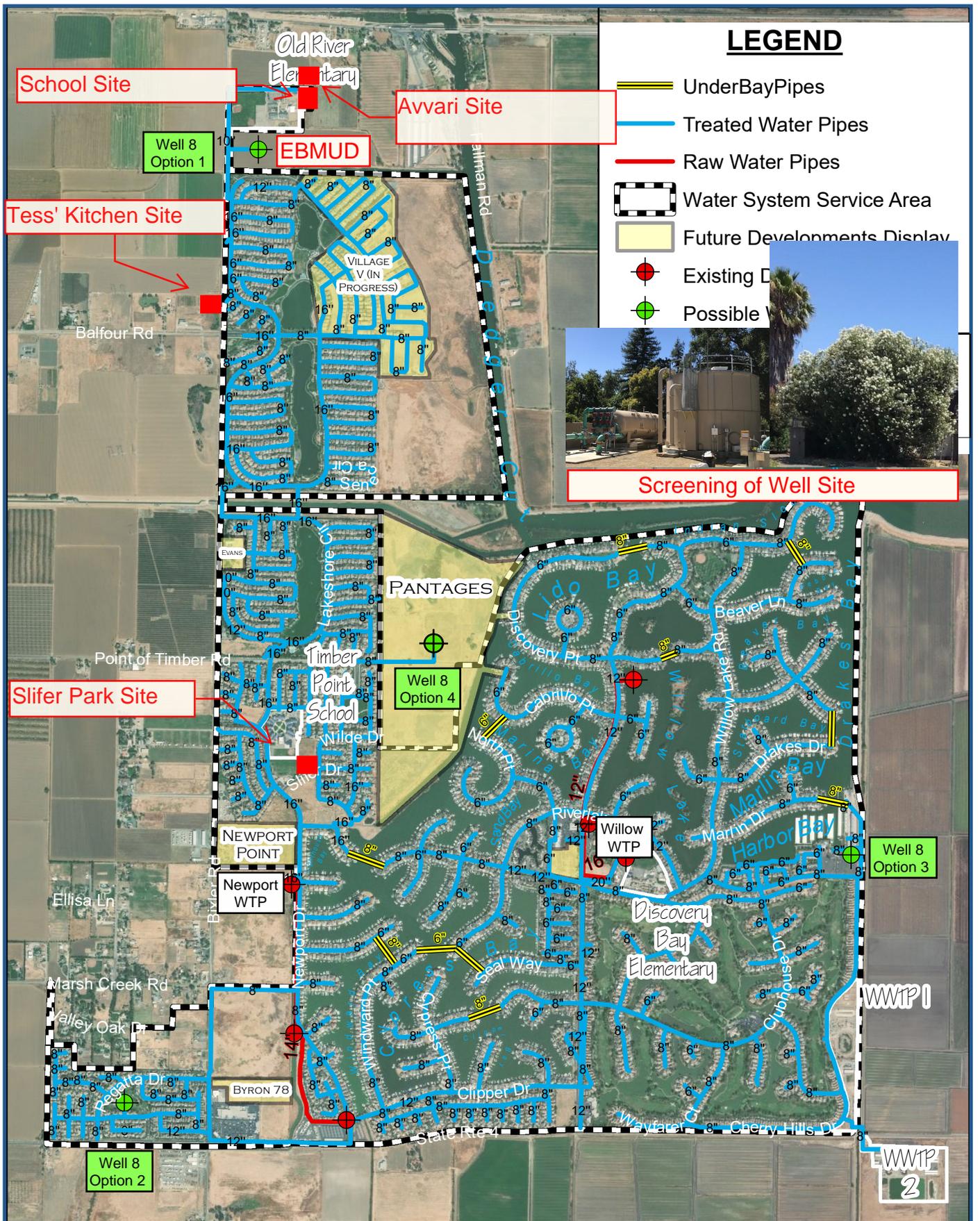
Tess' Country Kitchen.

Tess' Country Kitchen is located at the North-West corner of Bixler and Balfour Roads. The property owner is supportive of our project but is concerned about what losing ½ an acre could mean for her plans to open a farm to table restaurant and does not want to sell us the ½ acre until she has greater clarity from the County as to the requirements for her to open the restaurant. The Town could also secure this property through Eminent Domain but the improvement costs would be greater than the Avvari site.

Recommendation.

Discuss with Staff and provide feedback on the following options listed in order of preference:

- A. Continue to work with the County to determine if we can remove the condition of having to find an additional ½ acre of park land in order to secure an easement at Slifer Park. This site does have the added cost of installing several hundred feet of connecting watermain in the street.
- B. Continue to work with the Pantages developer. This would be the preferred alternative if they are able to move their project forward in a timely manner. Have Staff work to define what we will view as a “timely” schedule on which to base the feasibility of this option. Continue discussions with the developer as to what their expectations of supply would be. The cost-sharing concept is enticing and the flip side of that is to define what supply commitments we can feasibly promise to the developer knowing that Well 8 is intended to meet maximum demands and to offset storage requirements from Newport.
- C. Proceed with Eminent Domain proceedings for the Avvari Parcel. The eminent Domain and land expenses may be offset by the less costly utility connections associated with this site. Construction could begin in about a year.
- D. Hire a stormwater engineer to prepare a design to determine if the School basin can be used and approach all affected property owners for their approval. The down side of this option is that we wouldn’t know if this is a viable site until we process a grading plan through the County and determine if all the land owners are willing to provide their approval.



Repairing Waterline Under Willow Lake

The following describes Staff's and Luhdorff & Scalmanini's investigations to date and recommendations for repairing the waterline under Willow Lake.

Information Collected to Date

1. The 8" diameter pipe material is thin wall steel with a 0.33" mortar lining and a 1/3" asphalt coating rather than the cast iron pipe indicated on the as-built plans.
2. The video we took of the inside of the pipe showed that the pipe didn't look all that bad but we could only push the camera to the bottom of the pipe where we encountered a lot of sediment, which prevented us from getting video of the entire length of the pipe. We did not observe any catastrophic failure in the pipe along the length that we could video.
3. A corrosion engineer was sent a 12-inch section of the pipe and he reported that the depth of a half-dollar size corrosion pit observed in the steel was 0.04" and the pipe thickness was 0.106" adjacent to the corrosion pit. This means that the remaining thickness at the pit is just 0.066" and that 38% of the steel thickness has been lost in the area of the corrosion pit. Based on this information there is a high likelihood that the pipe failed due to corrosion.

Repair Options

1. Diver Inspection / Repair Option

Having divers excavate to the break in the pipe and install a repair clamp would cost approximately \$60,000. The uncertainty with this option though is that if the break is close to a bend in the pipe this option will not work, and to find this out we will be already \$20,000 or more into the project to perform the underwater excavation. This option would also require the Town to secure a Stream Bed and Lake Alteration Permit from Fish and Wildlife. We may also need to secure a permit from the Army Corps of Engineers but in talking to Gregory Harris, his experience has been that the Army Corps is slow to respond to Permit requests for information if they even respond at all. CEQA and permitting on this option could be as much as \$20,000 and would require hiring a wildlife biologist.

Staff is also concerned that because the pipe is showing evidence of significant corrosion it would only be a matter of a few years before the pipe fails again. Therefore, Staff is not in favor of the repair clamp option.

2. Horizontal Directional Drilling (HDD)

This option involves installing a whole new waterline under the lakebed using the Horizontal Directional Drilling method and pulling through a PVC or High Density Polyethylene pipe as noted in the attached drawing. The cost of this option would be approximately \$210,000. This option would also require the Town to secure a Stream and Lake Bed Alteration permit and possibly an Army Corps permit as previously mentioned in Option 1, CEQA on this option would also be more complicated.

3. Lining the Inside of the Pipe.

Install a liner on the inside of the pipe at a cost of about \$210,000.... \$110,000 for the lining, \$40,000 for cleaning and liner patch to stop lake water from entering pipe before lining and \$50,000 for JW to dig, replace valves, make tie-ins, disinfect and restore pits on either side of lake, and \$10,000 for bonding, insurance and misc. This option wouldn't require permits and the CEQA would just be a simple exemption. Also the liner is considered a "new" pipe useful life.

4. Abandoning the Pipe and Upsizing Existing Pipes.

Results of the hydraulic modeling performed by Luhdorff & Scalmanini of the area in question indicate that to maintain the status-quo of the pre-break system condition, the entire run of 8-inch on Discovery Bay Blvd. (DBB) up to the intersection with Beaver Ln. (~1800 LF) would need to be replaced with a 12-inch main, and the existing 6-inch on Beavers Ln. (~700 LF) would need to be replaced with an 8-inch main. This would be at a cost of over \$500,000.

Long Term Solutions for Remaining 11 Undercrossings

Staff has been discussing how to prevent such a failure at the other 11 undercrossings and has come up with 2 options.

1. The corrosion engineer estimates that it would cost approximately \$35,000 to put cathodic protection on the rest of the pipe crossings assuming there is electrical continuity across the entire pipe length. This would be in addition to the cost of JW digging 3 x 3 holes at each pipe end to connect the cathodic protection to the pipe.
2. Another option would be to line all of the deep water undercrossings, but this would be in excess of \$1 million.

Recommendation

Staff recommends that the best alternative would be to line the existing pipeline.

Staff also recommends that we install cathodic protection on the remaining undercrossings once it is determined that we have electrical continuity along the entire length of the pipelines.

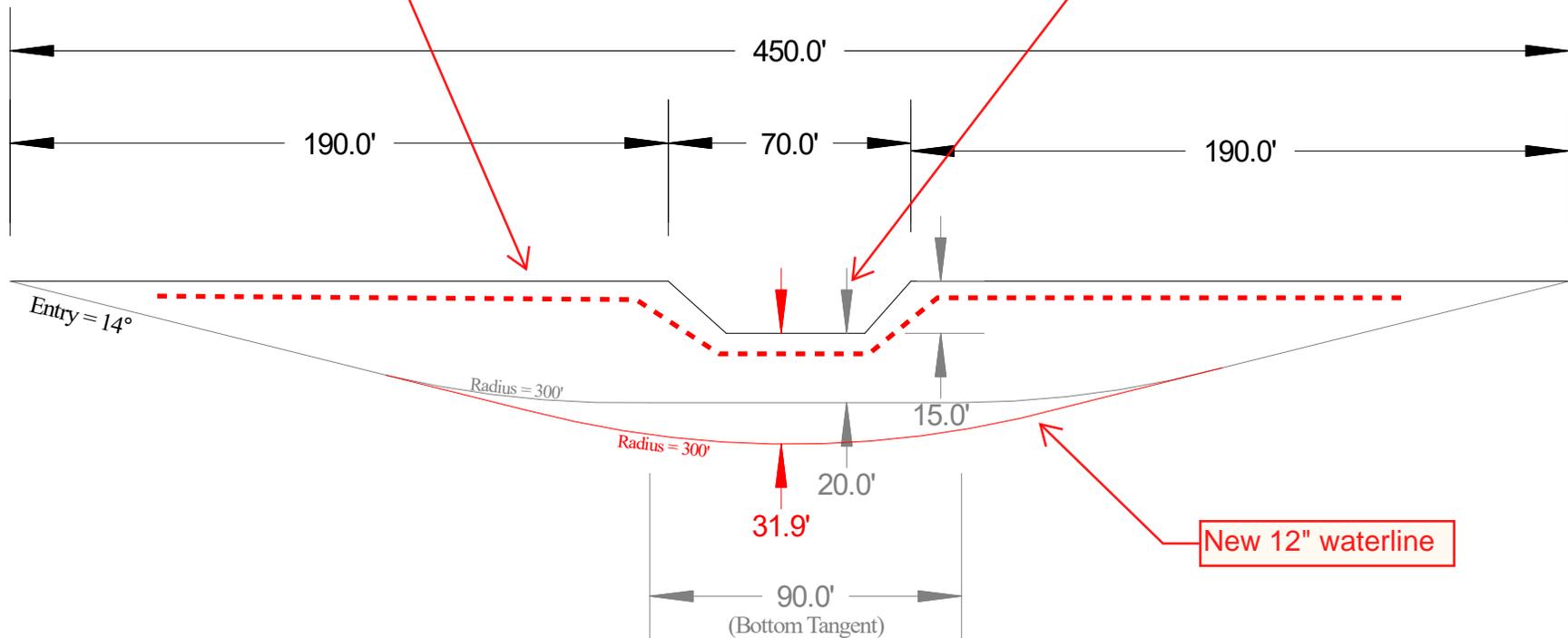
Discovery Bay

HDD Rough Sketch

J-C General Engineering, Inc.

Existing Waterline with 4' of cover that has failed.

Willow Lake



New 12" waterline

Notes:

Gray Profile = 20.0' vertical clearance with 90' of bottom tangent

Red Profile = 31.9' vertical clearance with no bottom tangent

*Entry and exit elevations assumed to be equal.